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Self Interested: Protecting the Cultural and Religious Privacy of Native Americans Through the Promotion of Property Rights in Biological Materials

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SELF-INTERESTED: PROTECTING THE CULTURAL AND RELIGIOUS PRIVACY OF NATIVE AMERICANS THROUGH THE PROMOTION OF PROPERTY RIGHTS IN BIOLOGICAL MATERIALS

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I. Introduction

According to its history, the Havasupai tribe has lived in the Grand Canyon since the beginning of human existence.[1] The Havasupai believe that the Grand Canyon is the birthplace of the human race, and that the tribe is charged with the sacred duty of protecting the canyon.[2] Recently, members of the Havasupai tribe donated blood samples for diabetes research to scientists at the University of Arizona.[3] Without the Havasupai's knowledge, some researchers published scholarly studies indicating that the Havasupai are genetically predisposed to schizophrenia and that the Havasupai tribe as a whole is descended from groups of people that migrated from Asia.[4] This unauthorized research contravened some of the most basic precepts of Havasupai religious belief and caused a great deal of pain in the community.[5]

There is nothing more personal and private than an individual's genetic makeup. As scientific technology progresses, DNA samples are more frequently used in research, and these samples create a risk of "reveal[ing] highly personal and potentially stigmatizing facts" about a donor's genetic makeup and heredity.[6] The information that can be gleaned from studying genetic samples is vast and largely unprotected by current law, which provides no judicially enforceable property rights in one's own body or the products derived therefrom. Accordingly, anyone whose genetic information is violated for research purposes has very little legal recourse.

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1. Leslie E. Wolf, *Advancing Research on Stored Biological Materials: Reconciling Law, Ethics, and Practice*, 11 MINN. J.L. SCI. & TECH. 99, 119 (2010).

2. *Id.*

3. Havasupai Tribe v. Ariz. Bd. of Regents, 204 P.3d 1063, 1067 (Ariz. Ct. App. 2008).

4. *Id.*

5. *Id.* at 1070.

6. Michael J. Markett, Note, *Genetic Diaries: An Analysis of Privacy Protection in DNA Data Banks*, 30 SUFFOLK U. L. REV. 185, 208 (1996).

But the issue of genetic privacy is even more compelling for members of Native American tribes. Their genetic uniqueness makes these people a target of interest of many researchers. Unfortunately, researchers sometimes conduct studies in a manner that is offensive to tribes and tribal members, and without property rights in their bodies, tribes have little power to pursue claims against researchers who have "stolen" genetic information from their members.

Courts should recognize property interests in tribal genetic materials for several reasons. Allowing tribal members to maintain property interests in their unique genetic composition allows tribes to ensure that the religious and cultural privacy of their members is protected. If tribal members retain property rights in their genetic information, tribal government and spiritual leaders can decide if and how that information is shared with researchers or other interested parties.

This comment will illustrate why all individuals should be afforded tangible property rights in their own bodies, and why the need for recognizing such rights is even more compelling within the Native American community. Part II of this comment examines the history of property interests in the human body and the attendant case law. Part III examines numerous examples of federal legislation that espouse preserving the cultural and religious freedoms of Native American tribes. Part IV considers the facts of the *Havasupai* case to give a more concrete example of why current laws are inadequate to protect the cultural and religious privacy of Native American tribes. Part V analyzes whether any claims currently available to individuals and tribes are sufficient to protect cultural and religious privacy, and explains why claims based on property rights are more appropriate to address these wrongs. Part VI concludes that courts should take the responsibility to acknowledge that all individuals, especially Native Americans, have recognizable property interests in their bodies.

II. Property Interests in Body Parts

Traditionally, property is defined as "the series of enforceable rights to use, possess, enjoy, exclude, dispose, and destroy" a thing.[7] "Ownership" is tied directly to these legal rights and not to the object itself.[8] For an individual to have a legally enforceable property interest in an object, he may possess some

7. Katheleen R. Guzman, *Property, Progeny, Body Part: Assisted Reproduction and the Transfer of Wealth*, 31 U.C. DAVIS L. REV. 193, 212-13 (1997) [hereinafter Guzman, *Property, Progeny, Body Part*].

8. *Id.* at 213.

or all of these rights. Plainly, he need only have one of these legal rights to say that he has a property interest at all.[9] For example, we would describe an individual who purchases a home as the "owner" of that real property. That person would have the right to dispose of the property by selling it or the right to use it as a residence. Even though that person can be described as the owner of the property, ownership does not give a person every type of potential property right in that home.[10] The owner of the property would have the right to exclude others from his home, but would not have right to exclude those with easements for public utility from the areas of his property to which they require workable access.[11] In many situations, the owner of the home would not own the minerals in the ground underneath his property, despite that he seems to "own" the property itself.[12] He would not be able to use, lease, or sell these mineral rights because his property interest would be limited to surface rights. The layman's conception of "ownership" therefore often includes some, but not all, types of interests in property.

Property rights are recognized by law and are "guaranteed and protected by government."[13] The definition of property does not enumerate specific items or categories of objects that may be property, but is intentionally vague so that courts may "adjust historical precedent to meet the needs of contemporary economic reality and the unpredictable manifestations of modern life."[14] Property rights thus must change to keep step with the evolution of society and technology. Courts have modified property laws as technologies advance to include property interests in such things as human cell lines.[15] These rights would not have fallen under the framework of protected property interests a hundred years ago simply because science had not progressed to the point where such a possibility could even be contemplated. To ensure that property law legitimately accommodates contemporary problems, courts and

9. *Id.*; Roy Hardiman, Comment, *Toward the Right of Commerciality: Recognizing Property Rights in the Commercial Value of Human Tissue*, 34 UCLA L. REV. 207, 219 (1986).

10. BLACK'S LAW DICTIONARY 1214 (Bryan A. Garner, ed., 9th ed. 2009) ("An owner may have complete property in the thing or may have parted with some interests in it.").

11. An easement is "[a]n interest in land owned by another person, consisting in the right to use or control the land, or an area above or below it, for a specific limited purpose." *Id.* at 585-86.

12. *See, e.g.*, Harris v. Chas. Pfizer & Co., Inc., 385 F.2d 766, 769 (8th Cir. 1967); Cent. Coal & Coke Co. v. Carseloway, 45 F.2d 744, 745 (10th Cir. 1930).

13. Hardiman, *supra* note 9, at 215.

14. *Id.*

15. *Id.* at 222.

legislatures must recognize property interests in the human body and its genetic information.

A. Property Interests in a Body

It is difficult to think of one's own body as property. Most people feel that the body is somehow different from other objects that are easily recognized as property and subject to "ownership," such as a house or a car. With the normative view of property as "things" rather than "rights," this conceptual barrier is understandable. Perhaps we feel that the body is something that cannot be property because owning, buying, or selling another person offends our morality. Yet these scruples were not always extended to all members of society. For a period of time in Western history, a wife was the property of her husband, and any offenses against her person were offenses against the property of the man.[16] Though this practice seems abhorrent today, it does show that women's bodies were once subject to property interests. Moreover, the atrocious practice of slavery, exercised by many different cultures throughout history, granted property rights to one person over the life and person of another.[17] Although neither of these examples represents enlightened legal thinking, they highlight that ownership in the body of another has been recognized in our past. If our moral sense of right and wrong compels us to protect individuals from ownership by others, what better way to safeguard such interests than by recognizing property rights in the human body? If every man has full property rights in his own body, he cannot be subject to "ownership" by another. At the same time, he is protected from less extreme – but nonetheless important – intrusions upon his privacy.

Apart from the reprehensible practices of slavery or gender inequality, past recognition of property rights in the body was most often discussed in cases involving harm done to the corpse of a loved one.[18] Under English common law, there were no recognized property rights in the corpse of a family member or in any parts that had been separated from a body.[19] The absence of a legal property right in the corpse of another is attributed largely to the separation of legal and ecclesiastical law in England during this time period. There were no

16. *Id.* at 224.

17. *Id.* at 224-25.

18. *E.g.*, Williams v. Williams, (1881-82) L.R. 20 Ch. D. 659.

19. Brotherton v. Cleveland, 923 F.2d 477, 481 (6th Cir. 1991); Hardiman, *supra* note 9, at 225; Markett, *supra* note 6, at 216; Stephen Ashley Mortinger, Comment, *Spleen for Sale: Moore v. Regents of the University of California and the Right to Sell Parts of Your Body*, 51 OHIO ST. L.J. 499, 503 (1990).

property interests in a body at law because ecclesiastical courts had exclusive legal authority over the bodies of the deceased.[20] Despite that courts of law had jurisdiction "over the burial grounds and monuments," they had no power over the body of the deceased.[21] This rule forbidding property interests in dead bodies carried over to early American legal systems, where some states allowed property interests in the bodies of loved ones, while others did not.[22] Later, the idea of quasi-property rights developed, allowing interests in the corpse of a loved one to be recognized and protected, but not to the same extent that the law protected other types of property.[23]

Despite that our notions of what constitutes property may not include the human body or its genetic information, if individuals are allowed to "use, possess, enjoy, exclude, dispose, and destroy" their bodies, then they have recognizable property interests in them.[24] Every person may use his own body and enjoy its fruits within the boundaries of the law. A man may profit from the manual labor he performs using his own body and enjoy the fruits of his labor.[25] Every person may make provisions for the disposal of his body after death by choosing to be buried or cremated, as allowable by law.[26] Every person may destroy his body by overexertion, stress, and lifestyle choices that may diminish one's health and longevity. If individuals may use, possess, enjoy, exclude others from, dispose of, or destroy their bodies, then they must, by the definition of property as a "series of enforceable rights,"[27] possess recognizable property interests in their physical bodies.

An individual's rights in his own body should be given the same – if not more stringent – protections as with any other kind of property because "the body is central to the individual's sense of identity."[28] Unfortunately, this is an area of the law that is moving much more slowly than the rapid progress in medical technology.[29] Medical procedures that were unimaginable decades ago now take place on a regular basis, and living individuals often have body parts or fluids separated from their bodies. Human tissues are often stored in

20. Hardiman, *supra* note 9, at 226.
21. *Id.*
22. *Brotherton*, 923 F.2d at 481.
23. *Id.*
24. Guzman, *Property, Progeny, Body Part*, *supra* note 7, at 212-13.
25. Hardiman, *supra* note 9, at 229.
26. *See In re* Estate of Moyer, 577 P.2d 108, 110 (Utah 1978).
27. Guzman, *Property, Progeny, Body Part*, *supra* note 7, at 212-13.
28. Michelle Bourianoff Bray, Note, *Personalizing Personalty: Toward a Property Right in Human Bodies*, 69 TEX. L. REV. 209, 239-40 (1990).
29. *See* Guzman, *Property, Progeny, Body Part*, *supra* note 7, at 196-97.

research facilities for many years, and the original donor of the tissue may not even remember that it was taken for research. It is now possible for individuals to donate organs, tissues, and bodily fluids for various purposes, and individual property interests in these bodily objects should be protected.

B. Property Interests in an Organ, by Any Other Name, Are Still Property Interests

Even if differing minds cannot agree whether there are already recognized property interests in the human body, there is both judicial precedent and statutory support for recognizing property interests in vital organs.[30] Though the right is not usually labeled as a property right, it functions as such. For example, statutes in a majority of states support the right of an individual to determine if and when he will donate organs and for what purpose these bodily tissues will be used.[31] These laws protect the right of an individual to dispose of his organs by donating them to a particular person, to a specific educational or research facility, or to an organ donation bank.[32] If an individual is permitted the legal right to determine the use, disposal, and possession of his organs, then he has many of the incidents of property "ownership."

1. The Uniform Anatomical Gift Act

The Uniform Anatomical Gift Act (UAGA) allows donors to make anatomical gifts of their bodies or organs by will, by affirmative statement, or by registration for a donor card or some similar type of document.[33] The decision to donate one's body or organs must be made and expressed by the donor during life, and if the decision is recorded appropriately, the conveyance of the anatomical gift takes place after the donor's death.[34] In effect, the Act allows individuals to make decisions about whether their organs will be removed from their bodies after death, and for what purposes they will be used. When an individual decides to donate his body or body parts, he may do so for the purpose of "transplantation, therapy, research, or education."[35] The type and manner of donations allowed under the UAGA seem to embrace the property interests of disposition, use, exclusion, and possession. Although the UAGA does not support the proposition that the human body is indistinct

30. *See* UNIF. ANATOMICAL GIFT ACT §§ 4-5, 20 (2006).
31. *Id.* § 4 cmt.; 22A AM. JUR. 2d *Dead Bodies* § 92 (2010).
32. UNIF. ANATOMICAL GIFT ACT § 4 cmt. (2006).
33. *Id.* § 5.
34. *Id.* §§ 4-5 cmts.
35. *Id.* § 4.

from other property, "it does recognize rights in the human body that can be classified as property rights."[36]

The UAGA recognizes that the choice to become an organ donor is an extremely personal decision, and gives this authority only to the individual, to the parent of a minor child, or to an individual's guardian or agent.[37] Even after the decision has been made to become a donor, the UAGA allows for revocation at any time, and this revocation is binding.[38] The Act states that "an individual's unrevoked refusal to make an anatomical gift of the individual's body or part bars all others from later making an anatomical gift of the body or part,"[39] thus protecting the bodily integrity and intent of the decedent. The UAGA places the intent of the donor before all other considerations, allowing individuals to decide if and how their bodies or body parts will be used for organ donation or research.

The dispositions of organs made within the framework of the UAGA are carried out in much the same way as the death-time disposition of property made within a will. Both a will and a donor card must be completed during the life of the individual.[40] Organ donation under the UAGA is at all times revocable, and wills, by their very nature, are as well.[41] In both cases, the transfer of the property, whether tangible personal property, real property, or an organ, is made after the death of the individual. When dispositions of property are made in a will, courts attempt fully to effectuate the intent of the testator.[42] If such latitude is given to testators when they write wills disposing of their personal property, the same deference should be given to the autonomous choices of donors to convey property interests in their organs to research or transplantation facilities. The importance of personal autonomy surrounding the disposition and use of one's property or one's body after death is the same whether an individual is conveying a vital organ for

36. Hardiman, *supra* note 9, at 216-17.

37. UNIF. ANATOMICAL GIFT ACT § 4.

38. *Id.* § 6.

39. *Id.* § 7 cmt.

40. *Id.* § 5; *see also* RESTATEMENT (THIRD) OF PROP.: WILLS & OTHER DONATIVE TRANSFERS § 3.1 (1999).

41. UNIF. ANATOMICAL GIFT ACT § 6; Mark Glover, *Formal Execution and Informal Revocation: Manifestations of Probate's Family Protection Policy*, 34 OKLA. CITY U. L. REV. 411, 440 (2009) ("[O]ne of the inherent characteristics of a will is its revocability.") (quoting 1 PAGE ON THE LAW OF WILLS § 21.1 (William J. Bowe et al. eds., 2003)) (alteration in original).

42. *See* RESTATEMENT (THIRD) OF PROP.: WILLS & OTHER DONATIVE TRANSFERS § 3.1(g) (1999).

transplantation, his body for scientific research, or tangible assets for the benefit of loved ones.

Although the UAGA is not binding federal law,[43] it has been adopted by many states, including Arizona, where the Havasupai live.[44] The widespread adoption of statutes based on the UAGA shows a "general policy concerning an individual's authority to control the use of a donated body part."[45] While the Act does not cover donations of blood or other bodily fluids, it recognizes that a donor has a strong interest in determining how a part of his body will be used after removal from his person.[46] Although some may hesitate to call these rights "property interests," the UAGA grants individuals the right to dispose of their organs and bodies through donation, and the power of disposition is a recognized property right.[47] Because individuals are permitted to transfer their body parts under the UAGA for use, possession, exclusion, and disposition by research and educational institutes, they have functional property interests in their organs and bodies.

2. Moore v. Regents of the University of California

A famous California case did very little to clarify what type of interest a person has in his organs. The Supreme Court of California discussed whether a conversion action could be maintained in the context of human tissue misused in medical research.[48] The plaintiff, Moore, "underwent treatment for hairy-cell leukemia at the Medical Center of the University of California at Los Angeles," where he was under the care of Dr. Golde.[49] At Dr. Golde's recommendation, Moore agreed to have his spleen removed, and allowed UCLA Medical Center staff to take repeated samples of "his blood, blood serum, skin, bone marrow aspirate, and sperm."[50] Dr. Golde told Moore that a splenectomy "was necessary to slow down the progress of his disease,"[51] and that the collection of specimens was needed to monitor Moore's health and

43. UNIF. ANATOMICAL GIFT ACT. § 1.

44. *Id.*; ARIZ. REV. STAT. ANN. § 36-844 (2007).

45. Moore v. Regents of the Univ. of Cal., 793 P.2d 479, 501 (Cal. 1990) (Broussard, J., dissenting). The Uniform Anatomical Gift Act has been adopted in thirty-nine states. UNIF. ANATOMICAL GIFT ACT § 1.

46. *Moore*, 793 P.2d at 501-02 (Broussard, J., dissenting).

47. Guzman, *Property, Progeny, Body Part*, *supra* note 7, at 212-13.

48. *Moore*, 793 P.2d at 480.

49. *Id.* at 480-81.

50. *Id.* at 481.

51. *Id.*

medical treatment.[52] What Moore was not told was that his spleen and bodily fluids would be used for research and for the development of a cell line by the UCLA Medical Center.[53]

The Supreme Court of California considered whether the common law action of conversion should be extended to cover situations where body parts or bodily fluids are the "property" in question.[54] Although the court expressed a desire to protect personal autonomy, it found that the societal value of medical research precluded extending conversion to cover this situation.[55] After weighing competing social interests, the Supreme Court of California found that Moore did not have any property interests in his cells, and thus could not bring an action for conversion against his doctor or the medical center.[56]

Justice Broussard, in his dissenting opinion, wrote that

> the pertinent inquiry is not whether a patient generally retains an ownership interest in a body part after its removal from his body, but rather whether a patient has a right to determine, before a body part is removed, the use to which the part will be put after removal.[57]

Justice Broussard believed that allowing Moore to bring a claim for conversion was not an *extension* of the principle of conversion, as the majority indicated, but a proper *application* of common law conversion.[58] If the allegations of Moore's complaint are taken as true, the defendants "improperly interfered with plaintiff's right in his body part at a time when he had the authority to determine the future use of such part."[59] Because the defendants interfered with Moore's right to determine whether his spleen and other cells would be used for developing a cell line, Moore should have been allowed to bring an action for conversion. Conversion, the "intentional exercise of dominion or control" over the property of another, is a tort that "so seriously interferes" with the interests of the rightful owner that the tortfeasor is forced to pay the full value of the property.[60] In this case, if Moore would have been entitled to

52. *Id.* at 485.
53. *Id.* at 481.
54. *Id.* at 493.
55. *Id.* at 494.
56. *Id.* at 487, 497.
57. *Id.* at 501 (Broussard, J., dissenting).
58. *Id.* at 502.
59. *Id.*
60. RESTATEMENT (SECOND) OF TORTS § 222A (1965).

the full value of his cells through an action for conversion, his recovery would have been considerably greater than that receivable through breach of informed consent because the estimated worth of the completed cell line that came from his cells was more than three billion dollars.[61]

The decision in *Moore*, including a concurring opinion, a dissenting opinion, and one opinion that concurred in part and dissented in part, did not help to clarify the issue of property interests in body parts.[62] The majority opinion in *Moore* was "ambiguous enough to suggest that a future plaintiff could bring and sustain a conversion action" if the party could make a better policy argument in favor of personal autonomy,[63] and many jurisdictions lack any law on point. It is thus still unclear whether an individual has a property interest in his own body, whether that property interest depends upon competing social policies, and what the limitations on that property interest might be. The *Moore* case is often cited to support the proposition that a patient does not retain property interests in his cells, organs, or tissues once they have been removed from his body,[64] but the validity of that stance is altogether unclear.

Despite that dozens of cases involving similar invasions of a person's bodily integrity rely on the holding in *Moore*,[65] the case does not give a clear explanation of why property interests cannot be recognized in body parts. The court merely states that property interests in body parts have not been and are not recognized.[66] It is high time that the courts let go of the outdated "no property rule" in favor of a judicial approach that promotes protection of both the corporeal self and personal autonomy.

3. Cases Recognizing a Property Interest in the Organs of Loved Ones

Another case involving the unauthorized use of organs resulted in a much different classification of the rights that were violated. After her husband's death, a woman in Ohio declined to make an "anatomical gift" of her husband's organs.[67] But after the coroner performed an autopsy on the

61. *Moore*, 793 P.2d at 482.

62. Bray, *supra* note 28, at 234.

63. *Id.* at 238.

64. *See, e.g.*, Greenberg v. Miami Children's Hosp. Research Inst., Inc., 264 F. Supp. 2d 1064, 1074-75 (S.D. Fla. 2003); Wash. Univ. v. Catalona, 437 F. Supp. 2d 985, 996 (2006).

65. *E.g.*, Miles, Inc. v. Scripps Clinic & Research Found., 810 F. Supp. 1091, 1096 (S.D. Cal. 1993); Suthers v. Amgen, Inc., 372 F. Supp. 2d 416, 428 (S.D.N.Y. 2005); United States v. Arora, 860 F. Supp. 1091, 1098 (D. Md. 1994).

66. *Moore*, 793 P.2d at 492.

67. Brotherton v. Cleveland, 923 F.2d 477, 478 (6th Cir. 1991).

husband's body, he allowed a representative from an eye bank to remove the husband's corneas for use in transplantation.[68] The wife brought a claim under 42 U.S.C. § 1983, alleging that she was wrongfully deprived of property without due process.[69] To the Sixth Circuit Court of Appeals, it was clear that the wife had been deprived of a property interest in her husband's body, regardless of how the state of Ohio wished to classify the interest.[70] The court held that, under Ohio law, the wife had a possessory right in her husband's body and a right to control its disposal.[71] These types of interests – the right to possession and the right of disposal – are property rights, regardless of how the state attempts to classify them.

Opponents of recognizing property rights in the human body would argue that acknowledging these rights leads to the "commodification" of the human body. There is fear that some individuals will enter into commercial arrangements that are against both public policy and the individual's health. A civilized society would not agree to subject human tissues to commercialization. But a property right would not necessarily create a right to convey that property for compensation.[72] All property rights are subject to legal limitations, and property rights in the human body and its genetic material could contemplate restrictions on compensated alienation. The fears of "commodification" and exploitation have not manifested themselves. There has not been a flood of relatives attempting to sell the corneas of their deceased kin to the highest bidder. Instead, the recognition of property rights has only allowed grieving family members to have control over the disposition of the bodies of their loved ones and to bring claims against those who interfere.

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68. *Id.*

69. *Id.* at 478-79.

70. *Id.* at 482.

71. *Id.* A similar case in Michigan was decided in favor of affording next-of-kin property rights in the body of a loved one. Whaley v. Cnty. of Tuscola, 58 F.3d 1111, 1113, 1116 (6th Cir. 1995) (noting that "next of kin have the right to dispose of the body in limited circumstances, possess the body for burial, and prevent its mutilation," and holding that there are "constitutionally protected property interests in the dead body of a relative").

72. Restrictions on trust land provide an apt example. Indians are unable to alienate trust land for compensation, despite that they retain other rights therein. "[T]he discovery doctrine . . . limit[ed] tribal ownership to use and occupancy [by taking] fee title and corollary rights to transfer." Katheleen R. Guzman, *Give or Take an Acre: Property Norms and the Indian Land Consolidation Act*, 85 IOWA L. REV. 595, 650-51 (2000). This bar to compensated alienation, however, does not create a similar bar to the maintenance of some enforceable property rights in trust property, including use, enjoyment, possession, and exclusion.

C. Property Interests in Blood

Blood is frequently donated to medical institutions and sometimes sold to blood banks. Because blood is easy to remove and is naturally replenished by the body, blood is more likely than other human tissues or fluids to be the subject of a commercial agreement.[73] Although there is a split in judicial opinion as to whether commercial sale of one's blood is better classified as the sale of a product or the rendering of a service,[74] both viewpoints support the proposition that an individual has legitimate (though sometimes functionally unrecognized) property interests in her blood.

1. Blood is a Taxable Commodity

In a 1979 case, the Internal Revenue Service (IRS) argued before the Fifth Circuit that Dorothy Garber owed taxes on income derived from the sale of her blood plasma.[75] Garber's "blood contained a rare antibody" – at the time, "she was one of only two or three people in the world" whose blood contained usable amounts of the medically valuable antibody.[76] Garber had received annual payments of approximately $80,000 for her plasma, but she did not pay federal income tax on these payments.[77] To require income tax payments, income must be derived from "compensation for services" or from "gains derived from dealings in property."[78] The court did not determine whether the money Garber received for her blood was better classified as a service or as property, noting that it was an unsettled area in the law.[79] The Fifth Circuit remanded the case, noting that blood plasma is "like any salable part of the human body" and can be classified as "tangible property."[80]

Because Garber was allowed to sell her blood plasma, and was required to pay taxes on the income she received therefrom, she had some kind of property interest in her bodily fluids. Garber is in possession of her blood while it is contained within her body, and she has the right to determine when and how she will dispose of it. Garber can exclude some medical facilities from taking her blood, and allow other facilities access to her medically valuable antibodies. Of chief importance to the IRS, Garber is able to enjoy the profits

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73. Hardiman, *supra* note 9, at 219.
74. *Id.* at 220.
75. United States v. Garber, 607 F.2d 92, 93 (5th Cir. 1979).
76. *Id.* at 93-94.
77. *Id.* at 94 n.1.
78. *Id.* at 95; I.R.C. § 61(a) (2006).
79. *Garber*, 607 F.2d at 97.
80. *Id.*

of her blood. Garber is able to exchange her blood – a fluid that is a product of her body – for valuable consideration. Possession, use, disposition, exclusion, and enjoyment are all property rights, and because Garber has these rights, her interests in her blood should qualify as property rights.

2. Genetic Privacy Can Only Be Protected by Property Rights

In *Doe v. High-Tech Institute, Inc.*,[81] a group of students consented to blood tests for rubella.[82] Without his permission, one particular student's blood sample was also tested for HIV.[83] Because the test results were positive, the laboratory sent notification to both the school that the individual attended and the Colorado Department of Health.[84] The court conceded that an individual has a general privacy interest in his own body and in any information about his health.[85] It held that individuals have "recognizable privacy interest[s]" in their own blood and "the medical information that may be derived" therefrom.[86]

The court recognized the exceptionally personal nature of having one's blood sample mishandled by unauthorized testing. It held that any "additional, unauthorized test . . . can be sufficient to state a claim for relief for intrusion upon seclusion."[87] While the student was able to bring this type of privacy claim, his rights would be better served through the recognition of property rights in his blood. A successful action for conversion creates a remedy that is equivalent to a forced sale of the property in question.[88] Unlike a claim that would only compensate the student for the harm done to his privacy,[89] a conversion claim would require the responsible party to compensate the victim for the full value of his genetic information.[90] Such a steep remedy for victims of unauthorized testing would create a strong financial incentive for research facilities to obtain informed consent before performing any type of testing on an individual's bodily materials. In *Doe*, the Colorado court recognized the importance of maintaining privacy in blood samples, but did no more to

81. 972 P.2d 1060 (Colo. App. 1998).
82. *Id.* at 1064.
83. *Id.*
84. *Id.*
85. *Id.* at 1068 (citing Norman-Bloodsaw v. Lawrence Berkeley Lab., 135 F.3d 1260 (9th Cir. 1998)).
86. *Id.* at 1069.
87. *Id.* at 1068.
88. RESTATEMENT (SECOND) OF TORTS § 222A (1965).
89. *Id.* § 652B.
90. *Id.* § 222A.

protect individuals. To afford an action in conversion, there would be no need to *change* the current law, but only to *apply* it differently.

In a similar case in the Ninth Circuit, employees of a federal agency were instructed to give blood and urine samples as part of a pre-employment health screening. These samples, unbeknownst to the future employees, were tested for conditions such as syphilis, sickle-cell anemia, and pregnancy.[91] When the employees learned that their fluid samples had been tested for these medical conditions without their knowledge or consent, they brought claims against the laboratory, asserting that their constitutional rights to privacy had been violated.[92] The circuit court found that "[t]he constitutionally protected privacy interest in avoiding disclosure of personal matters clearly encompasses medical information and its confidentiality."[93] The court found that the "performance of unauthorized tests" on an employee's blood or urine samples was the "*most basic* violation [of privacy] possible."[94] The court further articulated its concern for bodily privacy when it noted that there are "few subject areas more personal and more likely to implicate privacy interests than that of one's health or genetic make-up."[95]

If the employees in *Norman-Bloodsaw* were able to sue the laboratory for conversion, their potential remedies would be much higher. The remedy for conversion requires that the wrongdoer pay the full value of the property that was wrongfully interfered with,[96] awarding the victims the full value of their blood samples and all the genetic information contained therein. Most people, and most jurors, probably feel very strongly about the inherent, personal value of their own genetic information, and would determine the full value of the blood or tissue samples and genetic information to be fairly high. The forced sale of victims' genetic information thus would doubtless cost a laboratory significantly more than recovery through intrusion upon seclusion or some other privacy-based tort.

Because of the risk of higher judgments against them for unauthorized testing, laboratories and other facilities that collect and test tissue and fluid samples would be more careful to ensure that they obtain appropriate informed consent. Both *Doe* and *Norman-Bloodsaw* illustrate that courts possess high

91. Norman-Bloodsaw v. Lawrence Berkeley Lab., 135 F.3d 1260, 1265 (9th Cir. 1998).
92. *Id.*
93. *Id.* at 1269.
94. *Id.*
95. *Id.*
96. RESTATEMENT (SECOND) OF TORTS § 222A (1965).

regard for the right to privacy and autonomy. To better protect these rights, courts should recognize every person's property interest in his own blood.

D. Property Interests in Reproductive Materials

If there is a part of our bodies and genetics that we guard more fiercely than the rest, it is certainly our capacity to reproduce. This function of the human body, the capacity to engender offspring, inspires more emotions than any other type of bodily material that might fall into the hands of outside parties. As medical technology progresses and fertility clinics become more popular, it is commonplace for reproductive materials to be separated from the bodies of their progenitors, and with much greater frequency. Sperm, ova, and embryos are often removed from the bodies of donors to facilitate conception through assisted reproductive technology.

1. Sperm Is Recognized as Property

A court in California held that vials of sperm located at a medical facility can constitute property and are devisable by will. William Kane stored vials of sperm at a sperm bank in California before he committed suicide.[97] His will indicated that he wished the sperm to be transferred to his girlfriend, Deborah Hecht, in hopes that she would conceive a child with it.[98] William Kane's adult children from a previous marriage objected to the transfer of their father's genetic material, and asked for an injunction from the court to have the sperm destroyed or transferred to their possession.[99] The court found that Kane had a property interest "to the extent that he had decision making authority as to the use of his sperm for reproduction."[100] The court asserted that Kane's right to make decisions regarding the use and disposition of his bodily fluid was sufficient to constitute a property right that could be transferred at death.[101] Because the court recognized Kane's right to transfer his preserved sperm to his girlfriend, he had an enforceable property interest in it.

A Louisiana court similarly found sperm to constitute property and be transferable during life, just as one would give an inter vivos gift of any other

97. Hecht v. Super. Ct., 20 Cal. Rptr. 2d 275, 276 (1993) (directing superior court to vacate order to destroy stored vials of sperm).

98. *Id.*

99. *Id.* at 279.

100. *Id.* at 283.

101. *Id.*

type of property.[102] Hall was diagnosed with cancer and decided to store samples of his sperm before undergoing chemotherapy treatment.[103] He executed a document that purported to convey the stored sperm to his girlfriend in hopes that she would later conceive his child.[104] Hall died, and his next-of-kin attempted to block the transfer of the sperm samples to his girlfriend.[105] The court upheld a preliminary injunction that prevented Hall's girlfriend from using the sperm until there was a trial on the merits of Hall's competency, but it did note that sperm can be property and can be the subject of conveyance in the same manner as any other property.[106]

Collectively, these cases indicate that at least some courts recognize that sperm can constitute property and is transferable. Because sperm is transferable, its donor has a property right in it before the transfer occurs. Because a man has the right to dispose of his sperm by donating it to a fertility clinic or to a partner, he has a property interest in this reproductive material that should be protected under the law as such.

2. Frozen Embryos

Some couples attempting to conceive children with the assistance of a fertility clinic undergo in vitro fertilization. During in vitro fertilization, medical professionals retrieve multiple eggs from a woman's ovaries.[107] Some of these ova are fertilized and placed in a woman's uterus in the hopes that a child will result, and any additional eggs that are retrieved from the mother are fertilized and frozen so that she may try to conceive at a later time.[108] Once an egg has been fertilized, it is a pre-embryo.[109] Courts have held that pre-embryos are neither persons nor property, but have characteristics of both.[110] The Supreme Court of Tennessee described pre-embryos as "occupy[ing] an

102. Hall v. Fertility Inst. of New Orleans, 647 So.2d 1348, 1351 (La. Ct. App. 1994).

103. *Id.* at 1349-50.

104. *Id.*

105. *Id.*

106. *Id.* at 1351-52.

107. I. Glenn Cohen & Daniel L. Chen, *Trading-Off Reproductive Technology and Adoption: Does Subsidizing IVF Decrease Adoption Rates and Should It Matter?*, 95 MINN. L. REV. 485, 491 (2010).

108. *Id.*

109. *Id.*

110. *E.g.*, Doe v. Irvine Scientific Sales Co., Inc., 7 F. Supp. 2d 737, 742 (E.D. Va. 1998); Hecht v. Super. Ct., 20 Cal. Rptr. 2d 275, 281 (1993); *In re* Benjamin M., 310 S.W.3d 844, 849 (Tenn. Ct. App. 2009).

interim category" between person and property "that entitles them to special respect because of their potential for human life."[111]

Despite that these pre-embryos are made from the reproductive tissues of individuals, and that individuals have property rights in their reproductive tissue, courts do not classify pre-embryos as property because they have the potential, if properly implanted into a female body, to blossom into human life.[112] It is only this reverence for potential life that inhibits courts from declaring that couples have full property rights in their pre-embryos.[113] Genetic parents of frozen embryos have been described as having "an interest in the nature of ownership" in the embryos, but not an ownership interest itself.[114] Perhaps this is yet another example of courts conflating normative conceptions of "ownership" with property rights, but the interests are nonetheless unrecognized.

To best protect individuals and their genetic information, it is important that courts recognize the property interests that people have in their own bodies. Holding recognized property interests in one's own reproductive materials allows an individual to bring a claim for conversion when another severely interferes with his rights therein, affording a remedy equivalent to that of a forced sale for the value of the infringed-upon interest. Allowing conversion claims for reproductive materials would not be a modification of the law of conversion, but mere recognition of legal rights that every individual already possesses. For example, all people enjoy the profits of their manual labor, and all people are free to make provisions for the disposition of their bodies after death. Because we enjoy these rights in our own bodies, we have functional property interests therein. To protect these interests and allow people to bring claims to defend them, courts must recognize that every individual has property rights in her body, her body parts, her bodily fluids, and her genetic information.

III. Religious and Cultural Privacy of the Tribes

Because of the personal nature of medical information that can be ascertained from human tissue samples, property rights in body parts should be recognized to protect every individual's right to privacy and autonomy. Individuals and their next-of-kin are not usually in a position to dispute with

111. Davis v. Davis, 842 S.W.2d 588, 597 (Tenn. 1992) (reviewing case where divorcing couple cannot agree upon the disposition of their frozen embryo held at a fertility clinic).

112. Cohen & Chen, *supra* note 107, at 491.

113. *See Davis*, 842 S.W.2d at 597.

114. *Id.*

the staff of a research laboratory or medical institute that is using genetic materials inappropriately. Without the legal recognition and protection of property rights, individuals and their next-of-kin have few fruitful causes of action to bring against researchers and other professionals who misuse genetic information.

While the recognition of property rights in an individual's body is important for everyone, there are some groups that have an even greater need to protect their genetic information. As smaller groups of peoples that have often been overrun by the majority, Native American tribes have more compelling reasons to carefully guard their genetic information. Tribes, like others, have very little power to pursue claims against researchers that use their genetic information in ways of which the tribe would not approve. To survive as distinct nations, today's tribes work to preserve their cultural and religious privacy. To legitimately protect these privacies, it is essential that tribes and tribal members are afforded property rights in their genetic information.

Tribes have more reason to be wary of researchers who might violate their trust. As a small population of people with unique genetic characteristics, their genetic information is more heavily sought after than the genetic information of other members of society. Tribes have more reason to be fearful of unauthorized genetic research because the results can be very stigmatizing and damaging to their reputation as an ethnic group. Moreover, when scientists do research on genetic information harvested from tribal members, the results of the research are often misconstrued as representing findings enveloping the entire tribe.[115]

A. Historical Overview of Congressional Support for Native American Religion and Culture

Despite that the United States was founded on principles of religious freedom,[116] the treatment of Native American religious practices has not always been consistent with these ideals.[117] For a long period in American history, the federal government pursued an assimilationist policy toward

115. For example, blood samples were taken from only two hundred members of the Havasupai tribe. Havasupai Tribe v. Ariz. Bd. of Regents, 204 P.3d 1063, 1067 (Ariz. Ct. App. 2008). Genetic information extracted from these blood samples was used to support propositions that the Havasupai people, as a whole, were predisposed to certain diseases. *See id.* at 1066-67.

116. U.S. CONST. amend. I.

117. James R. Dalton, Comment, *There Is Nothing Light About Feathers: Finding Form in the Jurisprudence of Native American Religious Exemptions*, 2005 B.Y.U. L. REV. 1575, 1576.

Native American religion and culture.[118] During the late 1800s, the federal government discouraged the practice of Indian religion by overt legislation that outlawed Indian funeral ceremonies and other religious ceremonies, such as the Sun Dance.[119] Congress also supported sectarian boarding schools for Native American children.[120] These schools were far removed from the children's homes and families, in an attempt to isolate the children from Indian influences and assimilate them into white culture.[121] While the children attended school, they were banned from using any Indian language, custom, or religious practice.[122]

Beginning with the Meriam Report in 1928, the federal government changed its attitude toward Indian religion and culture.[123] The Meriam Report criticized the actions of the government in suppressing Indian religions and suggested a more tolerant approach.[124] Congressional actions over the past several decades have shown a greater concern with preserving and protecting Native American culture and religion.[125]

B. American Indian Religious Freedom Act

Congress enacted the American Indian Religious Freedom Act (AIRFA) to protect the religious freedom of the Indian tribes.[126] While the AIRFA does not give an individual tribal member a cause of action or any "judicially enforceable rights,"[127] it specifically enumerates the federal government's policy toward the right of Native Americans to "believe, express, and exercise the traditional religions."[128] Congress passed this legislation to articulate the federal government's policy toward Native American religious practices and

118. Louis Fisher, *Indian Religious Freedom: To Litigate or Legislate?*, 26 AM. INDIAN L. REV. 1, 8 (2001-2002).

119. *Id.* The Sun Dance was banned in 1881. *Id.* Federal officials outlawed the Sun Dance because many thought it was "connected with Indian militancy." United States v. Friday, 525 F.3d 938, 942 (10th Cir. 2008).

120. Fisher, *supra* note 118, at 8.

121. *Id.*

122. *Id.*

123. *Id.* at 10.

124. *Id.*

125. *E.g.*, 25 U.S.C. § 2901 (2006); 42 U.S.C. § 1996 (2006).

126. 42 U.S.C. § 1996.

127. Havasupai Tribe v. United States, 752 F. Supp. 1471, 1488 (D. Ariz. 1990) (quoting Lyng v. Nw. Indian Cemetery Protective Ass'n, 485 U.S. 439, 455 (1988)).

128. 42 U.S.C. § 1996.

to set the standard for federal agencies by requiring that they act with respect for the religious rights of Native American tribes.[129]

The AIRFA requires a federal agency to evaluate its policies and procedures with the aim of protecting Indian religious freedom, refraining from prohibiting access, possession, and use of religious objects and the performance of religious ceremonies, and consulting with Indian organizations in regard to the proposed action.[130]

Although Native Americans do not have judicially enforceable rights under the AIRFA, the Act is often used to support policy arguments in favor of other legislation passed to support Native American religious freedom. In a case involving exceptions to the Bald and Golden Eagle Protection Act, the United States District Court for the Northern District of Iowa cited the AIRFA, writing that "[i]t is the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian."[131]

If the federal government wishes to continue to protect the rights of Native Americans to practice their religious customs, it is essential that the courts recognize the property interests that Native American tribes and tribal members have in their bodies, body parts, and genetic information. Medical research, such as the unauthorized genetic research on Havasupai blood samples, is not only damaging to the privacy of the individuals involved, but also to the religious privacy of the whole tribe. Because publication of the results of genetic research can be in direct conflict with traditional religious beliefs of many tribes, tribes need enforceable property interests in the genetic information of their members to protect the tribe from intrusions into the tribe's cultural and religious privacy. With property interests in their genetic information, tribes can bring causes of action based on conversion instead of privacy. The remedy for a conversion is a forced sale of the property in question.[132] When the converted property is the genetic information of an entire tribe, an entire people, the damages will be much greater than the same injury brought under a claim based on privacy. If tribes are able to bring conversion claims and seek higher judgments against those who misappropriate their genetic information, researchers will be more careful to obtain informed consent in the future.

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129. *Havasupai Tribe*, 752 F. Supp. at 1488.

130. *Id.*

131. United States v. Oliver, No. CR99-0010, 2000 WL 34030990, *5 (N.D. Iowa Mar. 9, 2000), *aff'd*, 255 F.3d 588 (8th Cir. 2001).

132. RESTATEMENT (SECOND) OF TORTS § 222A (1965).

C. Exceptions to the Bald and Golden Eagle Protection Act

Congress has an ongoing relationship with the tribes and strives to pass legislation in their best interests.[133] In 1940, Congress passed the Bald Eagle Protection Act to shield the dwindling American population of bald eagles from extinction.[134] Golden eagles were not protected under the original language of the Act, but in 1962, the Act was amended to include protections for the golden eagle as well.[135] The Bald and Golden Eagle Protection Act (BGEPA) provides for both civil and criminal penalties. In its current form, the BGEPA allows a maximum fine of $5,000 and imprisonment of up to one year for the first violation, and a maximum fine of $10,000 and imprisonment of up to two years for each subsequent violation.[136]

The bald eagle has cultural significance to most Americans because it is the symbol of both the United States and its government.[137] The eagle's symbolic importance, however, is not limited to the government of the United States. Eagles play a significant part in the religious and spiritual practices of many tribes, and body parts of eagles are such important religious symbols that they have been likened to the Christian cross.[138] The eagle is seen as a holy "messenger" that is connected with the Creator.[139] For this reason, Native Americans often view eagle parts as essential elements to communicate with the spirit world.[140] One ceremony that requires the use of an eagle is the Sun Dance.[141] Many tribes perform this weeklong ceremony, and the tail fan of an eagle must be offered as part of the dance.[142] Because the eagle has significance to the cultural and religious practices of many different tribes, any limitation on the hunting of eagles or the use of eagle parts creates limitations on Native American religious practices.

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133. *See* COHEN'S HANDBOOK OF FEDERAL INDIAN LAW 418-19 (Nell Jessup Newton et al. eds., LexisNexis 2005) [hereinafter COHEN].

134. Dalton, *supra* note 117, at 1589; Roberto Iraola, *The Bald and Golden Eagle Protection Act*, 68 ALB. L. REV. 973, 974 (2005).

135. Dalton, *supra* note 117, at 1589; Iraola, *supra* note 134, at 973.

136. 16 U.S.C. § 668 (2006); Iraola, *supra* note 134, at 975-76.

137. Dalton, *supra* note 117, at 1587-88.

138. *Id.* at 1586-87 (quoting United States v. Thirty-Eight Golden Eagles or Eagle Parts, 649 F. Supp. 269, 276 (D. Nev. 1986), *aff'd*, 829 F.2d 41 (9th Cir. 1987)).

139. *Id.* at 1587.

140. *Id.*

141. United States v. Friday, 525 F.3d 938, 942 (10th Cir. 2008) (citation omitted).

142. *Id.*

Because of the federal government's special relationship with the Indian tribes[143] and its concern with protecting their cultural and religious freedom, Congress made special allowances for tribal members when it passed the BGEPA.[144] Recognizing the importance of the eagle in Native American religious practices, the BGEPA codifies an exception for Native Americans who wish to use eagles or eagle parts for religious purposes.[145] Any member of a federally recognized tribe may submit an application to the United States Fish and Wildlife Service to receive eagle bodies or eagle parts.[146] The Fish and Wildlife Service established the National Eagle Repository, which stores and distributes eagle bodies and eagle parts to approved applicants.[147] By making special provisions for Native American use of eagle bodies and eagle parts, Congress has reaffirmed that protecting Native American culture and religion continues to be an important goal of federal Indian policy.

Many tribal religious ceremonies that use eagle parts or eagle bodies can only be performed with pure specimens.[148] This means that the eagle or eagle part used in the ceremony cannot be reused from year to year, and the eagle "cannot have died through poison, disease or electrocution, and it cannot be roadkill."[149] Unfortunately, most of the eagle bodies and eagle parts held in the Repository are those that are found as victims of roadkill or by electrocution on power lines.[150] Eagles that died when struck by automobiles or shocked by power lines are not pure enough for some religious ceremonies. For situations where an eagle from the Repository would be unfit for the ceremonial purposes of the tribe, the Secretary of the Interior may give permission to an individual to take an eagle from the wild.[151] A tribal member may write to the Migratory Bird Permit Office to obtain a permit to take an eagle from the wild. The tribal member must explain why an eagle from the Repository does not meet the requirements for the ceremony, which species of

143. The relationship between Congress and the Indian tribes has been described as a relationship between a guardian and a ward. United States v. Kagama, 118 U.S. 375, 384 (1886). Generally, Congress is presumed to act in the best interest of the tribes. Lone Wolf v. Hitchcock, 187 U.S. 553, 568 (1903).

144. 16 U.S.C. § 668(a) (2006); *see also* Dalton, *supra* note 117, at 1611.

145. Iraola, *supra* note 134, at 973 & n.4.

146. *Id.* at 979.

147. *Id.* at 979-80.

148. United States v. Friday, 525 F.3d 938, 943 (10th Cir. 2008).

149. *Id.*

150. *Id.* at 944.

151. *Id.*

eagle is needed, and how many eagles the tribal member wishes to take.[152] If the use of eagles would not adversely impact the preservation of the overall eagle population, the Secretary of the Interior is authorized to issue permits to Native Americans to allow them to hunt and take eagle specimens from the wild.[153]

This exception to the prohibition on hunting eagles is evidence of Congress's intent to carefully guard the religious and cultural rights of the tribes. Despite that eagles are endangered species protected by law, Congress's concerns about the cultural and religious freedom of the tribes override this critical legislation. Because Congress is willing to make exceptions to legislation that protects the bald eagle – the most symbolic and revered animal in the nation – courts should recognize that protecting the cultural and religious freedom of Native Americans is an imperative aim. Because exceptions can be made to legislation protecting endangered species, exceptions can be made to traditional property laws – especially when such exceptions do not truly alter the status of the law, but merely the characterizations thereof.

D. Native American Graves Protection and Repatriation Act

In another legislative move that shows high regard for Native American cultural and religious privacy, Congress passed the Native American Graves Protection and Repatriation Act (NAGPRA).[154] The NAGPRA protects Native American "human remains," "funerary objects," and "objects of cultural patrimony."[155] Items of cultural patrimony include any objects that have ongoing significance to the Native American group.[156] The significance of an object of cultural patrimony can derive from "historical, traditional, or cultural importance."[157]

The NAGPRA requires that every federal agency and museum that possesses Native American human remains or funerary objects create an inventory of the items.[158] These provisions of the NAGPRA apply to all

152. *Id.* at 944-45.

153. *Id.* at 944; 16 U.S.C. § 668a (2006); 50 C.F.R. § 22.22 (2011); Iraola, *supra* note 134, at 973 & n.4.

154. 25 U.S.C. §§ 3001-3013 (2006); *see also* Michelle Hibbert, Comment, *Galileos or Grave Robbers? Science, The Native American Graves Protection and Repatriation Act, and the First Amendment*, 23 AM. INDIAN L. REV. 425, 456-57 (1998-1999).

155. 25 U.S.C. § 3002 (2006).

156. COHEN, *supra* note 133, at 1236.

157. *Id.*

158. 25 U.S.C. § 3003 (2006).

federal agencies that hold Native American remains or cultural objects and museums that are funded by the federal government, including institutions of higher learning.[159] The inventories must be created in cooperation with Indian tribal governments and religious leaders,[160] and are created for the purpose of notifying interested tribes that federal agencies or museums have possession of Native American remains and cultural objects.[161] Armed with this knowledge, the tribe may then request that the Native American human remains and funerary objects be returned to them.[162]

Congress found Native American cultural objects important enough to warrant protection and repatriation under the NAGPRA, but also important enough to justify implementing legislation that makes the use or profit from these cultural items a federal crime. The Act itself provides civil penalties for failure of any museum or agency to comply with its provisions.[163] A provision was also adopted to make trafficking of Native American human remains or cultural items a crime under the United States Code.[164] Any individual that knowingly buys, sells, or uses any of the cultural items or remains outlined in the NAGPRA is subject both to fines and up to one year's imprisonment.[165] Both the NAGPRA and criminal provisions of the United States Code underscore the seriousness with which Congress views the religious and cultural rights of Native American peoples.

The legislative history of the NAGPRA reveals that Congress is concerned with treating Indian remains with dignity and allowing tribes possessory rights over human remains and cultural objects associated with their tribes.[166] The NAGPRA recognizes that tribes have some type of property or quasi-property rights in the remains of their ancestors.[167] This right to possession includes the right to decide how and where human remains should be interred and what should be done with the objects of cultural value.[168] This right of possession in the remains of ancestors is a property right.

159. COHEN, *supra* note 133, at 1236.
160. 25 U.S.C. § 3003(b)(1)(A).
161. *Id.* § 3003(d).
162. *Id.* § 3005(a)(1).
163. *Id.* § 3007(a).
164. 18 U.S.C. § 1170 (2006).
165. *Id.*
166. Hibbert, *supra* note 154, at 430.
167. *Id.* at 453.
168. 25 U.S.C. § 3002(a).

E. The Indian Arts and Crafts Act of 1990

Yet another piece of federal legislation enacted to protect the cultural and religious privacy of the tribes is the Indian Arts and Crafts Act (IACA). The IACA was enacted to protect Indian art and Indian cultural privacy.[169] It prevents the sale of goods that are falsely represented to be Indian-made.[170] The Act is intended to clear the market of false Indian art to ensure that tribes can better profit from the creation and sale of their art.[171] Essentially, it affords an intangible property right in Native American cultural privacy, one of the elements that many people believe essential to the long-term survival of the tribes.

In an article on tribal cultural sovereignty, Rebecca Tsosie writes, "Cultural resources, both tangible and intangible, are of critical importance to Native peoples, because Native culture is essential to the survival of Indian Nations as distinctive cultural and political groups."[172] Some aspects of Native American culture, such as religious customs, eagles, or artwork, are so important to tribes that Congress has passed federal legislation directly addressing them.

The passage of the AIRFA, the BGEPA, the NAGPRA, and the IACA shows that, in at least some instances, Congress honors its obligation to protect tribal interests, including the rights of cultural and religious freedom, by affording property rights or quasi-property rights to tribes and their members in a variety of circumstances. If Congress's intention is to protect the cultural viability of the tribes, extending the protections of property law to Native American genetic information can only help to further the policy of defending Native American culture and religion. With the protections of legal claims based on property law, Native American tribes could better ensure that their cultural and religious privacy would be respected. Remedies for property-based claims like conversion are very powerful tools in the hands of the tribes. If Native American tribes were permitted to bring suit based on their property rights in their own bodies, medical and research facilities would be economically compelled to obtain informed consent before each and every instance of using Native American genetic information for research. In this way, tribes could closely monitor research practices to determine whether

169. COHEN, *supra* note 133, at 1264.

170. *Id.* at 1263.

171. *Id.* at 1263-64.

172. Rebecca Tsosie, *Reclaiming Native Stories: An Essay on Cultural Appropriation and Cultural Rights*, 34 ARIZ. ST. L.J. 299, 300 (2002).

tribal cultural and religious beliefs are being respected throughout the research process. If the genetic information of tribal members is thereafter treated in a way that is not in accord with tribal beliefs, tribes could then turn to property claims to seek restoration.

IV. The Havasupai and Tribal Property Interests in Genetic Information

The Havasupai Tribe of Arizona is principally located in Supai Village, at the bottom of the Grand Canyon.[173] According to Havasupai religious history, the tribe has "inhabited the [Grand Canyon] from the beginning" of human life.[174] The Havasupai believe that the Grand Canyon is "the birthplace of the human race," and that they are entrusted with the sacred duty of protecting the canyon where they live today.[175] Like many other Native American tribes, the Havasupai have a strong cultural and spiritual connection to their environment.

When a disproportionate number of tribal members started to develop diabetes in the 1980s, the Havasupai turned to a trusted friend for guidance.[176] John Martin, a professor of anthropology at Arizona State University (ASU), had studied the tribe for years and had cultivated a friendship with the Havasupai.[177] A member of the tribe approached Martin, asking him whether there was anything that could be done to research the high rate of diabetes among the Havasupai.[178] Martin contacted another professor at ASU, Dr. Therese Markow, because of her expertise in genetics.[179] Dr. Markow agreed to help with the diabetes research, but wanted to conduct additional research on schizophrenia in the Havasupai population.[180] Martin told Markow that the Havasupai were only interested in diabetes research.[181]

Between 1990 and 1992, blood samples were taken from more than two hundred members of the Havasupai tribe.[182] The diabetes research proved inconclusive, but researchers from both ASU and the University of Arizona continued to use the Havasupai blood samples for other research projects on

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173. SUPAI VILLEGE IN HAVASUPAI, http://www.havasupaitribe.com/village.html (last visited Apr. 25, 2011); Havasupai Tribe v. Ariz. Bd. of Regents, 204 P.3d 1063, 1066 (Ariz. Ct. App. 2008).

174. Wolf, *supra* note 1, at 119.

175. *Id.*

176. *Id.*

177. *Havasupai Tribe*, 204 P.3d at 1066.

178. *Id.*

179. *Id.*

180. *Id.*

181. *Id.* at 1066-67.

182. *Id.* at 1067.

evolutionary genetics, schizophrenia, and inbreeding.[183] Dr. Markow had applied for a research grant to study the genetics of schizophrenia among the Havasupai without the knowledge of Dr. Martin or the Havasupai.[184] This grant was later approved.[185] In 2002, Martin discovered that research was still being conducted on the Havasupai blood samples, but not for diabetes. He informed the Havasupai Tribal Council of his concerns.[186] The Havasupai contacted ASU to get information on the whereabouts of the blood samples and the research being conducted.[187]

In 2003, a doctoral student at ASU presented research performed on Havasupai blood samples. This research was not related to the study of diabetes.[188] The most harmful part of this research centered on migratory genetics. The results of this study, indicating that the Havasupai descend from people who migrated from Asia to North America, were in direct conflict with traditional Havasupai beliefs.[189] The Havasupai tribe esteem themselves to be the "traditional guardians of the Grand Canyon," entrusted with the duty to protect the birthplace of humanity.[190] Because the Havasupai believe that their origins lie within the Grand Canyon, research performed with Havasupai blood samples indicating that the tribe descends from Asia is deeply harmful to Havasupai cultural and spiritual identity. Not only did ASU researchers violate the trust of the Havasupai and the bounds of the diabetes research project, but they threatened Havasupai cultural and religious privacy in the process.

On May 9, 2003, the Havasupai issued a banishment order against ASU, its professors, and its employees.[191] The terms of the research agreement between ASU and the Havasupai had been violated, and the tribe had suffered cultural, religious, and personal harm. ASU and the Havasupai agreed to allow an independent investigator to examine what kinds of research had been performed on the Havasupai blood samples and the current whereabouts of the samples.[192] During the investigation, the independent body found that researchers at ASU did not believe that the tribe understood that the blood

183. *Id.*
184. *Id.*
185. *Id.*
186. *Id.*
187. *Id.*
188. *Id.*
189. *Id.*
190. *See* Wolf, *supra* note 1, at 119.
191. *Havasupai Tribe*, 204 P.3d at 1067.
192. Wolf, *supra* note 1, at 121.

samples would be used to study schizophrenia.[193] The investigation also revealed that Dr. Markow might have instructed a staff member to search through tribal medical records during the night, when the tribal clinic was closed, to look for evidence of schizophrenia in the community.[194]

The Court of Appeals of Arizona reversed the judgment of the superior court and remanded the case because the superior court erred in granting summary judgment to the defendants.[195] The court found that the notices of claim contained enough information to show that the tribal members' rights had been violated by ASU's research practices.[196] Because there were enough facts supporting the settlement demands in the notices of claim, summary judgment in favor of the defendants was improper.[197] Before the case went to trial for a second time, the parties agreed to an out-of-court settlement.[198]

Plaintiffs in the case did not bring property-related claims against the Arizona Board of Regents, Dr. Markow, or any other defendants because existing case law does not recognize property interests in one's blood. But because of the nature of the cultural and religious privacy interests violated, the most equitable remedy available to the tribe would require the court to recognize a property interest in this case and in similar cases in the future. If the Havasupai tribe had been allowed to bring a property-based claim such as conversion, its recovery for the harm done to its religious privacy doubtless would have been greater. This larger judgment or settlement would have stood as a warning to all research facilities using Native American genetic materials, and would give these facilities a strong economic incentive to work with the tribes in conformity with tribal beliefs.

V. Conversion Best Protects the Cultural and Religious Privacy of Native American Tribes

Nothing could be more harmful to a tribe than genetic research that dispositively denies the tribe's account of its history. The notice-of-claim letter from the Havasupai to the Arizona Board of Regents states that "ASU's actions have invaded the personal privacy of Havasupai tribal members and

193. *Id.*

194. *Id.*

195. *Havasupai Tribe*, 204 P.3d at 1075.

196. *Id.*

197. *See id.*

198. Amy Harmon, *Indian Tribe Wins Fight to Limit Research of Its DNA*, N.Y. TIMES (Apr. 21, 2010), at A1, *available at* http://www.nytimes.com/2010/04/22/us/22dna.html (last visited Apr. 25, 2011).

the cultural and religious privacy of the Havasupai Tribe."[199] By using Havasupai blood samples to show that the Havasupai are likely descended from Asia, researchers have turned the Havasupai tribe's genetic materials against its own cultural and religious teachings.

Tribal members should be granted enforceable property rights in their bodies and genetic information so that they may safeguard their unique genetic makeup. Just as federal legislation such as the NAGPRA grants tribes property interests in the remains of their ancestors, tribes and individual tribal members should similarly have property rights in their own bodies. Scholars generally have made arguments in favor of two types of legal protections that are already available to tribes: tort law and quasi-property law. But both tort claims and quasi-property claims are insufficient to adequately protect the information contained within the genetic makeup of tribal members.

A. Privacy Tort Claims Are Insufficient to Protect Tribal Genetic Privacy

While many would agree that respect for tribal religious privacy is a legitimate goal, some would argue that current tort law is sufficient to protect tribes and to compensate them for harms that occur. There are tort claims for invasion of privacy, including unreasonable public disclosure of private information and intrusion upon seclusion.[200]

To bring a claim for invasion of privacy by public disclosure of private facts, the plaintiff must show that the fact disclosed was private, that it was disclosed to the public, that the disclosure was one that would be considered highly offensive to a reasonable person, that the fact was not an issue of public concern, and that the person disclosing did so with reckless disregard for the privacy of the wronged individual.[201] The problem with using this tort for invasions of Native American genetic privacy is that it fails to take into account any of the cultural or religious harm that a tribe or tribal member will incur when the private facts are disclosed to the public. For most plaintiffs with claims of public disclosure of private facts, the harm suffered is a personal harm to their reputation and privacy. By contrast, the harm to a tribal member whose private genetic information has been disseminated to the public will affect not only the individual member's privacy, but also his spiritual and cultural privacy and the religious and cultural privacy of the entire tribe. As seen in the *Havasupai* case, dissemination to the public of private genetic

199. *Havasupai Tribe*, 204 P.3d at 1068.
200. Doe v. High-Tech Inst., Inc., 972 P.2d 1060, 1064-65 (Colo. App. 1998).
201. *Id.* at 1065.

information hurt the entire tribe's religious privacy because the findings were in direct opposition to the religious beliefs of the Havasupai tribe.

An additional difficulty with using this tort claim is the proof problems that a tribal member will face in trying to establish that the disclosure was highly offensive to the reasonable person. While it is clear that the reasonable person would be offended by unauthorized testing of his genetic material, it is not clear that the reasonable person would be deeply offended for religious reasons. Because the reasonable person, and the average juror, is unlikely to understand that Native American religion is deeply pervasive in every aspect of daily life,[202] the reasonable person may not find the violation of religious privacy to be highly offensive. Because tort claims are judged in accordance with the reasonable person standard, tort claims fall short of protecting Native American cultural and religious privacy.

Another type of privacy claim, intrusion upon seclusion, is often brought in cases involving unauthorized testing.[203] Intrusion upon seclusion requires that someone intentionally intrude upon the solitude of the plaintiff and that the intrusion be considered offensive to the reasonable person.[204] The same proof problems exist for this type of tort claim as are found in public disclosure of private facts. The reasonable person's view of certain types of conduct is not necessarily compatible with the way that a tribal member would view the very same conduct. Many tribes place emphasis on community and life as a group,[205] in contrast to the individualistic conceptions of life in western society. This difference may make the harm to Native Americans unlike the harm to non-Indians. Intrusion upon the seclusion of a tribal member's genetic history is not just an intrusion upon the individual, but an intrusion upon the entire tribe's religious privacy and life-way.

Tort claims protecting privacy are based on the harm that a reasonable person would suffer. Because the reasonable person's conception of what constitutes offensive conduct may be fundamentally different than the reasonable Native American person's, tort claims are insufficient to protect tribes. To illustrate, consider two cases in which researchers exceed the scope

202. *See* 42 U.S.C. § 1996 (2006).

203. *E.g.*, *Doe*, 972 P.2d at 1065.

204. *Id.*

205. Before the introduction of European influences, most Native American tribes were structured around "[k]inship groups and associated social relations, rather than individual citizens." COHEN, *supra* note 133, at 250. These kinship groups formed the basic building blocks of Native American society. Political power was associated with the community at large, rather than with a particular individual, and the goal of political action was the promotion of harmony with the group. *Id.*

of their proposed study by performing unauthorized genetic testing on blood samples and publishing the results. In one case, the individual is not a member of any federally recognized Indian tribe. She can bring claims based on the violation of her privacy, including intrusion upon seclusion and public disclosure of private facts. Her case would be heard by a jury, who would determine the measure of her damages. The jury will consider how this woman was injured by the unauthorized genetic testing, and will consider whether a reasonable person would be offended by this type of privacy violation. Her damages will be based on the harm that the reasonable person would have suffered.

In a second case, the individual is a member of a Native American tribe. Her genetic privacy was violated in exactly the same manner as the woman who was not a tribal member, but the harms she suffers are much different. Because she is a member of a very small minority group, the results of the genetic research are labeled as representative of her entire tribe. The published results disparage the tribe by conflating the unfortunate test results of one with the likely test results of all others, and are in direct conflict with the tribe's cultural history. The harm becomes not only individual, but tribal, and to an egregious degree.

The second woman is also entitled to bring claims based in privacy, including intrusion upon seclusion and public disclosure of private facts. When her case goes before a jury, she will be entitled to exactly the same kinds of damages as the first woman. A jury will decide her case and will determine her damages based on the offense that a reasonable person would have felt. But the reasonable person's view of the injury is not the same as the reasonable Native American's measure of the harm done. The jury's determination of damages will include harms that the individual woman has suffered, but not the visceral harms that the other members of her tribe doubtless have suffered. Because the harms that the woman suffered were not only personal injury, but also religious, cultural, and tribal injury, is it truly just to afford her the same measure of damages as the non-Indian woman?

These differences show the insufficiency of tort claims for violation of genetic privacy. Despite that these two women were both victims of the same unauthorized researched, the harms that they suffered are very different, and the law should account for such differences. Because American culture is distinct from that of many Native American tribes, it is impossible to accurately portray the type and depth of damages within the confines of the reasonable person standard. Because tort claims are unable to account for religious, cultural, or communal harms, they are insufficient to adequately

protect the interests of Native American tribes and their members in the case of unauthorized genetic testing.

B. Quasi-Property Rights and the Right of Commerciality Are Insufficient to Protect Tribal Genetic Privacy

Quasi-property rights have been championed as the most fair way to protect an individual's interest in his own body, while simultaneously protecting society's interest in medical and scientific research.[206] A limited property right, such as the right of commerciality, would allow a person to have "intangible rights in the commercial potential of his or her own body."[207] This right of commerciality does not give an individual full property rights in his own body, bodily fluids, and genetic information, but a mere right to the commercial value of his body.[208]

While this quasi-property right might be helpful in instances where the tissues are used for the development of patents and products that have some commercial value, it would do nothing to protect the cultural and religious privacy of groups like the Havasupai. A quasi-property right, such as the right of commerciality, would only protect an individual from being deprived of profit made using his cells or tissues. To the Havasupai and to many other groups, money is neither the object of litigation nor a cure for the harm done. It is important to note that "the right of commerciality would not apply to the use of human tissue for research; pure, nonprofit research would not be actionable."[209] While it is essential to prevent any chilling effect on medical or technological research, even nonprofit research, if done without proper consent from the donor of the tissue, can be harmful.

Quasi-property causes of action might help some plaintiffs to recover for their injuries, but would fail to protect other groups deserving of compensation for harms incurred. The cases of *Moore* and *Havasupai* illustrate this point perfectly. If quasi-property rights were afforded to the plaintiffs from these cases, they would be permitted to bring a claim for any unauthorized genetic research resulting in some kind commercial gain. Moore would be able to recover the value of the cells that were used to develop a cell line worth more than three billion dollars.[210] Accordingly, it is very likely that his damages will be quite high. The Havasupai, on the other hand, will have no recognizable

206. *See generally* Hardiman, *supra* note 9, at 227-36.
207. *Id.* at 258.
208. *Id.* at 261-62.
209. *Id.* at 262.
210. *See* Moore v. Regents of the Univ. of Cal., 793 P.2d 479, 482 (Cal. 1990).

cause of action under a quasi-property theory because no product was produced from the unauthorized genetic research. Despite that the results of the unauthorized genetic research were made public, creating a multitude of social, cultural, and religious harms, the Havasupai would have no compensable harm under a quasi-property cause of action. Because the research was performed by a university that was unable to create a marketable product from this genetic research, the Havasupai will recover nothing.

Making the distinction between cases where the unauthorized genetic research leads to profit and those where it leads to disparaging published works seems an arbitrary line to draw. The unauthorized research in both cases was extremely harmful, but one party will be able to recover a large amount, while the other plaintiffs will recover nothing at all. Recognizing property rights in genetic materials eliminates the need to draw such arbitrary lines by providing a cause of action that affords comprehensive relief.

If the courts were to recognize property rights in genetic materials, both Moore and the Havasupai tribe would be able to seek damages for their injuries through a claim for conversion. Making a cause of action reliant on the fortuitous circumstance of research resulting in a profitable product seems to draw an arbitrary distinction that the law should not tolerate. Recognizing only quasi-property rights in cells and tissues provides little deterrence to research facilities performing unauthorized genetic research because there is no risk of a judgment against them unless the research results in financial gain. If, and only if, the research proved profitable would the facility be required to compensate the plaintiff for the value of his tissues and cells. The risk that research institutions will continue to perform unauthorized research is too great to make such a concession.

To protect all types of groups from unauthorized genetic research, the courts should recognize a cause of action based in property law. Recognizing enforceable property rights in genetic material gives every individual the right to sue for the conversion of his genetic information, regardless of whether the research was profitable for the violating institution.

C. Claims Based on Property Rights Provide the Most Comprehensive Protection for Individual and Tribal Rights in Genetic Privacy

If tribal members have property rights in their body parts and bodily fluids, they can exercise control over the use of their genetic information. With enforceable property rights, tribal members will be able to monitor any research undertaken and bring claims against those who do not comply with the wishes of the tribe. They will also be able to bring claims for conversion against those who perform unauthorized research.

Conversion is the "unauthorized assumption and exercise of the right of ownership over goods or personal chattels belonging to another, to the alteration of their condition or the exclusion of the owner's rights."[211] If human tissue is recognized as personal property of the individual, then any unauthorized use of that property could be subject to a claim for conversion. An action for conversion will stand not only where property has been taken from the rightful owner, but also in any situation where a person exercises rights that are inconsistent with the rights of the true owner. For example, "should the patient seek the return of the tissue, the failure of the physician to deliver it is an 'exclusion' of the patient's personal property rights," and the patient would have a claim for conversion.[212] In cases like that of the Havasupai, where researchers perform tests that are beyond the scope of authorization, researchers should be subject to a claim for conversion because they have exercised rights over the tissue that are inconsistent with the rights of the Havasupai to refrain from participating in certain types of medical studies.

Allowing individuals to sue for conversion of their genetic information would protect patients by allowing them to sue physicians or researchers who wrongfully use their genetic information. Unlike privacy causes of action that fail to take into account religious, cultural, or tribal harms, the remedy for conversion requires a fact-based analysis of the full value of the property in question. The remedy for conversion is a forced sale of the property.[213] Because the victim of conversion must be given the full value of the property in question, victims of conversion are better situated than victims of privacy torts or quasi-property rights. Privacy torts only compensate victims for the harm that would be suffered by the reasonable person, and quasi-property recovery depends largely upon whether the unauthorized research resulted in profit for the institution. Only a claim for conversion would require a research facility to pay a victim the full value of the genetic information that was misappropriated.

Whatever the value of the misappropriated genetic information – including the personal value, the value to the tribe, and the value in protecting religious and cultural beliefs – would be the value of the material converted. To compensate victims of unauthorized genetic research, a medical or research institution subject to an action for conversion would be required to pay victims

211. Hardiman, *supra* note 9, at 250 (quoting BLACK'S LAW DICTIONARY 300 (5th ed. 1979)).

212. *Id.* at 251.

213. RESTATEMENT (SECOND) OF TORTS § 222A (1965).

the full value of the misappropriated genetic information. In a case like that of the Havasupai, where unauthorized testing was published in contravention of the most basic religious and cultural precepts of the tribe, the value of that genetic information would be especially high.

By recognizing individual property rights in genetic information, courts can make clear to physicians and researchers that they could be held financially liable for unauthorized research. If researchers and medical professionals are aware of the onerous economic consequences of converting the genetic information of another, they will be more careful to obtain informed consent before conducting research. Raising awareness of consent requirements can help both research facilities and individual donors because the parties will have an incentive to engage in an open and honest discussion regarding the disposition of genetic material before patients choose to donate.

Furthermore, in cases of unauthorized genetic research, it is easier for the plaintiff to prove the elements of conversion than the elements of a privacy tort. The plaintiff need only show that he had a possessory interest in something, that the defendant exercised rights that were inconsistent with the plaintiff's own property rights, and that resulting harm occurred.[214] The plaintiff need not prove that the defendant converted the property with ill intentions – only that the defendant intended to exercise rights inconsistent with the rights of the owner.[215] This is a much lower burden on the plaintiff than would be required for privacy torts. Privacy torts, such as public disclosure of private facts, require that the injured party show that the defendant acted with reckless disregard for the plaintiff's privacy.[216] By instead using conversion and concomitantly lowering the burden of proof with regard to the mental element, patients and donors will be more likely to prevail when their genetic information has been used against their will.

Moreover, claims for conversion do not require the harm to be compared to what is offensive to the reasonable person. Privacy torts require that the intrusion be offensive to the reasonable person,[217] but the level of outrage felt by the reasonable person may not mirror the harm done to a Native American whose cultural and religious privacy is violated by unauthorized genetic research. Because Native American customs and religious beliefs are not something that the "reasonable person" would consider when examining the

214. *See id.*
215. *See* Hardiman, *supra* note 9, at 248 (citing AM. JUR. 2D *Bailments* § 118 (1980)).
216. *See* Doe v. High-Tech Inst., Inc., 972 P.2d 1060, 1065 (Colo. App. 1998).
217. *Id.*

offensiveness of an intrusion, property claims like conversion are better suited to protect the unique perspectives of Native American peoples.

Recognizing an individual's property interests in her own body, tissues, fluids, and genetic information would allow each member of a tribe to protect her own cultural and religious privacy. Recognized property rights would allow each person to determine if and when she would like to contribute her body, body parts, or genetic information to medical or scientific research. By giving tribes and tribal members property rights in their bodies, body parts, and genetic information, they would be able to bring effective claims against those who misuse the body parts or genetic information.

VI. Conclusion

Property is best defined as the legal bundle of rights that include the "rights to use, possess, enjoy, exclude, dispose, and destroy [a] thing."[218] An individual need not have all of these rights to have a property interest in a thing, so long as he has at least one.[219] Because individuals are permitted to use their bodies, enjoy the fruits of the labor performed by their bodies, exclude others from their bodies, make provisions for the disposal of their bodies after death, or destroy their bodies by making poor lifestyle decisions, they have functional property rights in their bodies. Courts and lawmakers may hesitate to call these property interests, but in that hesitation, they place form over substance.

If courts and legislatures recognize the property interests that individuals have in their bodies and genetic information, individuals will be better able to protect themselves from unwanted intrusions on their privacy. In situations where researchers use an individual's body parts or genetic information in a way he finds distasteful and to which he did not consent, he can bring a claim for conversion, even after the parts have left his body.

Though the issues of genetic privacy are important to all, there are some segments of the population where the risks of misappropriation of genetic material are even more compelling. Native American tribes have been marginalized, persecuted, and, more recently, subjected to undesired genetic research. The federal government has a special obligation as guardian to protect the tribes, and any threat to their cultural viability or religious privacy is a threat to the sustainability of the tribe as a political entity. Congress has passed numerous pieces of legislation specifically targeted at protecting the

218. Guzman, *Property, Progeny, Body Part*, *supra* note 7, at 212-13.
219. *Id.* at 213.

cultural and religious privacy of the tribes. The exceptions to the BGEPA and the NAGPRA are examples of legislation that show the seriousness with which Congress regards its duty to the tribes. To further protect these important aspects of Native American culture, property rights in the bodies and genetic information of tribal members must be protected. Without enforceable property rights in their genetic material, researchers may continue to stigmatize the tribes and imperil the very subsistence of their culture.